

ABSTRACT

The present invention relates to a method for transmitting binary data at a rate of R bits per second via an optical conductor of length d . A transmitter produces pulses of duration τ , which is considerably shorter than the bit period $1/R$ associated with the rate R . Owing to the dispersive characteristics of the optical conductor, these pulses are broadened on their path to the receiver to a value which is approximately equal to the bit period $1/R$. One advantage is that there is no a priori need to use a laser with a narrow spectral width to achieve a long transmission distance d .

Figure 2